

# Current Water Conditions in Massachusetts

## July 10, 2008



- June precipitation was near normal
- June streamflows were generally normal
- June ground-water levels were normal
- Reservoir levels are generally normal

### Precipitation Conditions

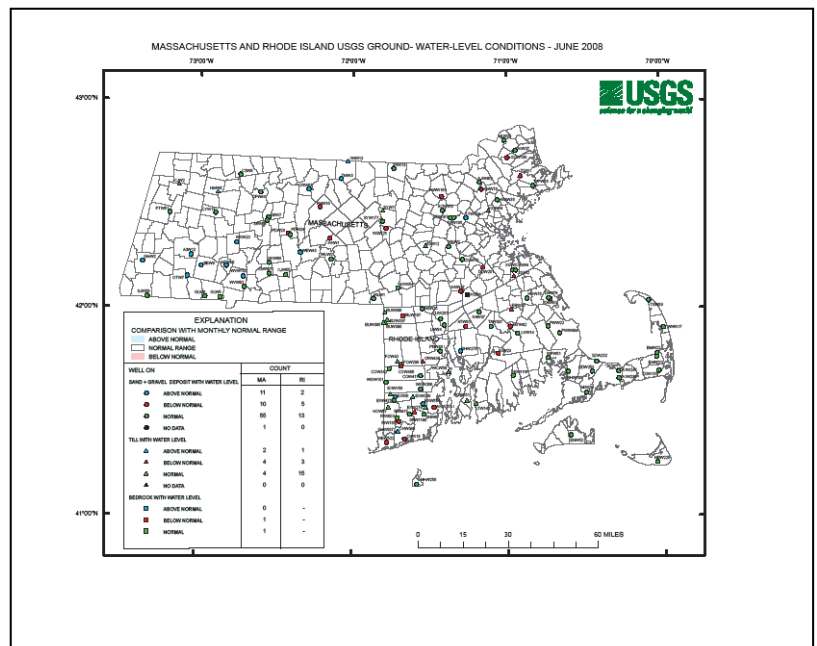
June State-wide precipitation was slightly above normal, equaling an estimated 4.25 inches, which is about 115 percent of the long-term normal for June. The regions of Massachusetts received between 74 percent (southeast) and 201 percent (west) of normal precipitation during June. A table of June 2008 estimated precipitation statistics, based on precipitation data from the Department of Conservation and Recreation and National Weather Service precipitation monitoring networks is attached. A map at the back of this report shows the distribution of June total rainfall in New England.

As of July 8, monthly precipitation was generally below normal for this time of the month in Massachusetts.

### Ground Water Levels

Ground-water levels reported by the United States Geological Survey (USGS) at the end of June 2008 were generally normal (white areas on map). The USGS assessment of ground-water levels is based on 124 wells in Massachusetts and Rhode Island with 10 or more years of record.

The USGS ground water level map and a Water Conditions Statement for the end of June 2008 can be viewed at the web site:  
[http://ma.water.usgs.gov/water/water\\_g.htm](http://ma.water.usgs.gov/water/water_g.htm)



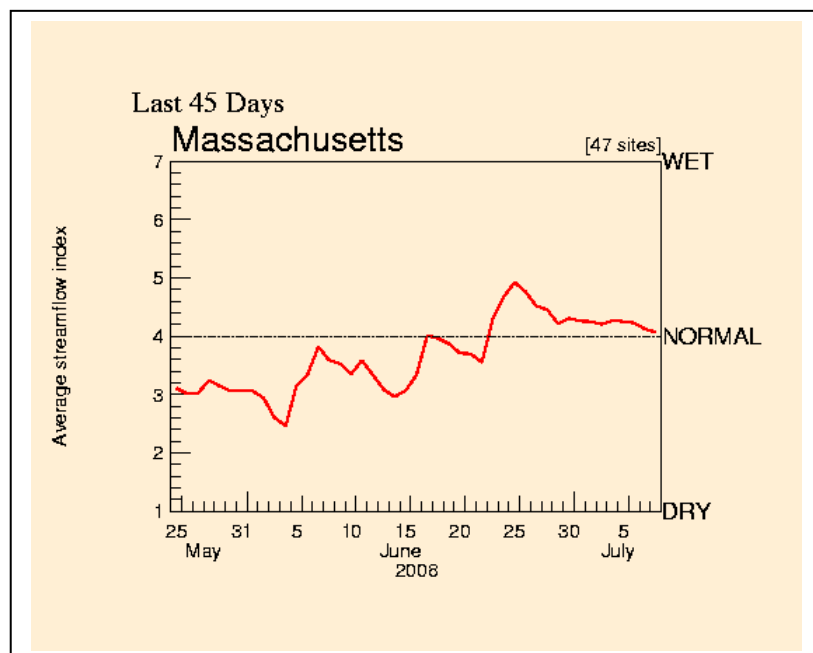
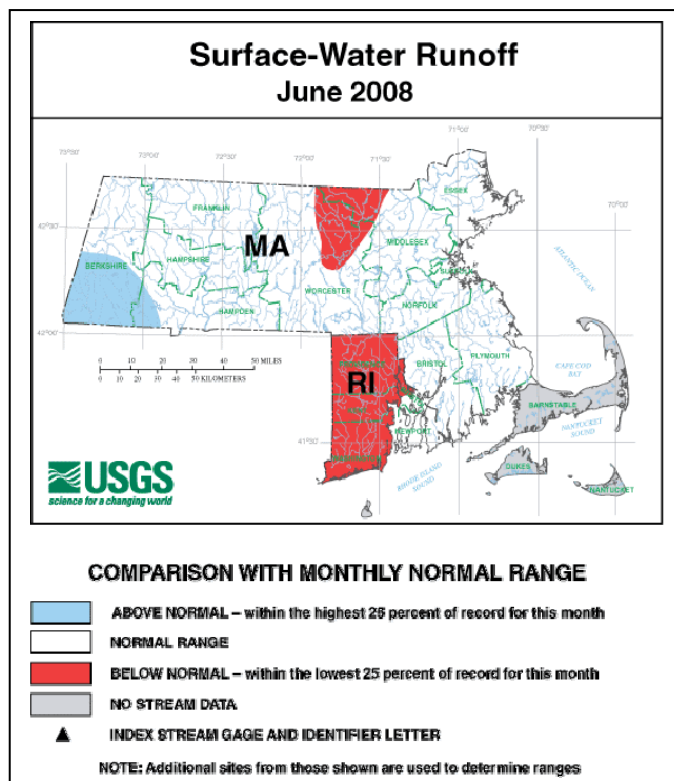
## Stream Flow

During June stream flows in Massachusetts that are monitored by the United States Geological Survey (USGS) were generally normal (white area on map). Flows were below normal (red area) in the north central part of Massachusetts, and the extreme southwest of the state had above normal streamflow (blue area).

The graph below depicts a composite daily streamflow relative to normal streamflow for Massachusetts as of July 8, 2008. The graph is a composite of 47 real time gages across the state with a long period of record. Below normal streamflow at the beginning of June slowly rose to above normal near the end of the month. Several small rises during the month were caused by precipitation events.

Additional information on streamflow is available from the USGS web page:

<http://ma.water.usgs.gov/water/waters.htm>



### KEY:

1 = New record low for day  
 2 = < 10<sup>th</sup> percentile  
 3 = 10<sup>th</sup> – 24<sup>th</sup> percentile  
 4 = 25<sup>th</sup> – 74<sup>th</sup> percentile  
 5 = 75<sup>th</sup> – 89<sup>th</sup> percentile  
 6 = ≥ 90<sup>th</sup> percentile  
 7 = New record high for day

## Water Supply Reservoir Levels

Surface water reservoir percent full values for water supply sources provided by water suppliers are listed below. The reservoir levels listed are reported to be normal for this time of year.

*June /July 2008 Massachusetts Reservoir Status*

Reservoir/City or Town	Percent Full	Reservoir/City or Town	Percent Full
Quabbin	97	Beverly/Salem	93
Worcester	94	Lynn	75.5
Cobble Mt./ Springfield	94	Taunton/New Bedford/Assawompsett	96

Note: N.A. Indicates data not available for this report

### Drought Indices/Forecasts

The National Drought Mitigation Center's (NDMC's) July 1, 2008 Drought Monitor Map of Massachusetts, shown at right, indicates that a portion of southeast Massachusetts is abnormally dry.

### Standardized Precipitation Index:

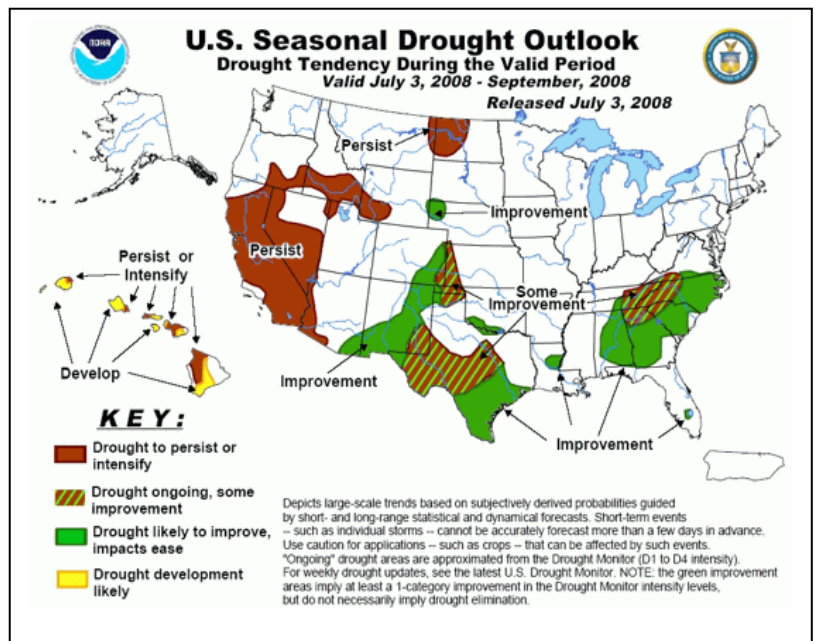
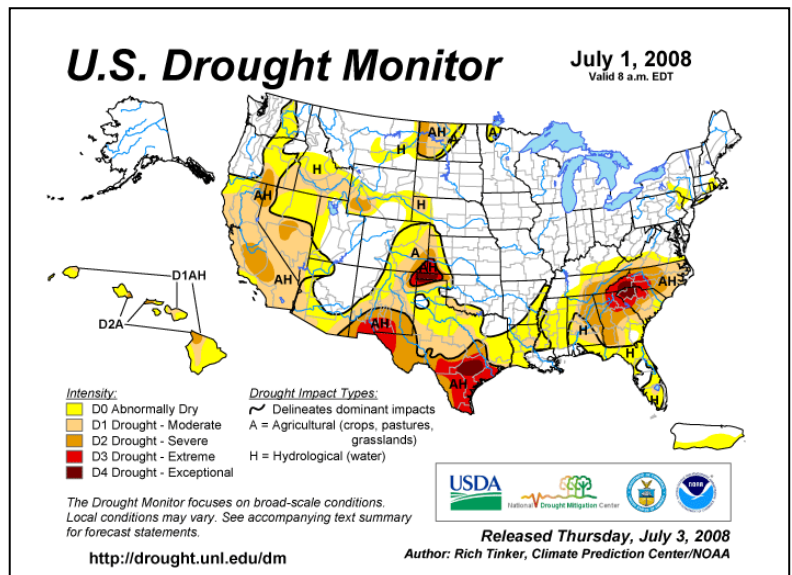
The Western Regional Climate Center's (Desert Research Institute, University and Community College System of Nevada) 1, 3, 6, and 12-Month Standardized Precipitation Index through the end of June shows normal to extremely wet conditions across Massachusetts.

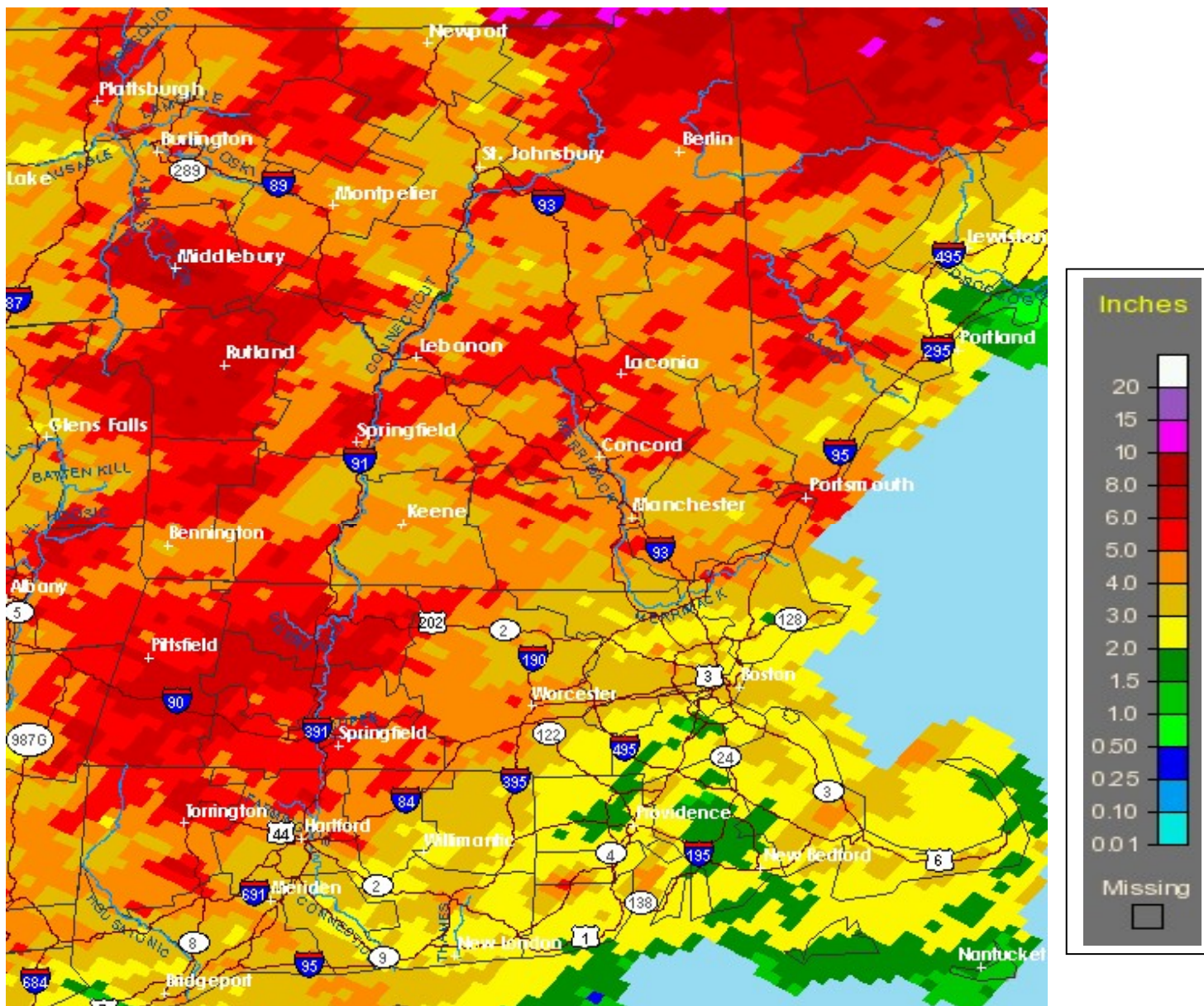
NWS/NOAA's Climate Prediction Center: The U.S. Seasonal Drought Outlook dated July 3, 2008 predicts normal conditions for Massachusetts through September 2008.

### Extended Forecasts

Seasonably warm temperatures are forecast to continue in Massachusetts, with occasional thunderstorms during the next week.

The National Weather Service Climate Prediction Center's extended 8-14 day (July 15 – 21) forecast predicts above normal temperatures and near normal precipitation for Massachusetts. The 1-month extended forecast predicts normal precipitation and temperature.





[http://www.srh.noaa.gov/rfcshare/precip\\_analysis\\_new.php](http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php)

## TOTAL RAINFALL JUNE 2008



This report was prepared by the Massachusetts Department of Conservation and Recreation. Data were obtained from the sources described in the report and June September be preliminary in nature. Additional information, previous and future water conditions reports can be found on our web site:

<http://www.mass.gov/dcr/waterSupply/rainfall/>